IN THE CLAIMS

Claim 1. (Currently amended) A method for validating a rear steering angle of a vehicle, comprising:

receiving a plurality of signals indicative of said rear steering angle;

checking at least one of said plurality of signals to determine if it falls within a valid range;

correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid; and

signaling a rejection of if any of said plurality of signals is found to be invalid.

Claim 2. (Currently amended) A method for validating a rear steering angle of a vehicle, comprising:

receiving a plurality of signals indicative of said rear steering angle;

checking at least one of said plurality of signals to determine if it falls within a valid range;

correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid;

signaling a rejection of if any of said plurality of signals is found to be invalid, wherein said correlating includes comparing said first signal with an expected value at about an inflection point of said second signal.

Claim 3. (Original) A method as defined in Claim 2, said correlating further comprising:

adding a second rear-wheel angle offset corresponding to said inflection point to a signal corresponding to said second signal in response to said comparing.

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Claim 4. (Original) A method as defined in Claim 3, said correlating further comprising:

subtracting a center value from said second signal; and

multiplying a result of said subtracting by a scale factor.

Claim 5. (Original) A method as defined in Claim 3, further comprising:

computing said expected value with reference to a look-up table.

Claim 6. (Original) A method as defined in Claim 3, further comprising:

computing said expected value by evaluating a continuous function.

Claim 7. (Original) A method as defined in Claim 1, said correlating comprising:

calculating a steering angle corresponding to one of said first signal and said second signal so as to create a calculated angle; and

computing an expected value of the other of said first signal and said second signal in accordance with said calculated angle.

Claim 8. (Original) A method as defined in Claim 7, said correlating further comprising:

comparing said expected value of said other of said first signal and said second signal with an actual value of said other of said first signal and said second signal.

Claim 9. (Original) A method as defined in Claim 8, said correlating further comprising:

determining that any of said plurality of signals is invalid if said expected value and said actual value are not substantially equivalent.

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Claim 10. (Original) A method as defined in Claim 7, wherein at least one of said calculating and said computing further comprises using a look-up table.

Claim 11. (Original) A method as defined in Claim 7, wherein at least one of said calculating and said computing further comprises evaluating a continuous function.

Claim 12. (Original) A method as defined in Claim 1, wherein said plurality of signals comprises a plurality of signal components of a single carrier signal.

Claim 13. (Original) A method as defined in Claim 1, wherein said receiving further comprises providing a single sensor having two signal outputs.

Claim 14. (Original) A method as defined in Claim 1, wherein said checking further comprises:

comparing at least one of said plurality of signals with an upper limit; and
comparing at least one of said plurality of signals with a lower limit.

Claim 15. (Currently amended) A storage medium encoded with a machine readable computer program code comprising:

computer code for receiving a plurality of signals indicative of a rear steering angle;

computer code for checking at least one of said plurality of signals to determine if it falls outside a valid range and is invalid;

computer code for correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid; and

computer code for signaling a rejection of if any of said plurality of signals are found to be invalid.

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Claim 16. (Cancelled)

Claim 17. (Currently amended) A rear steering system for a vehicle, comprising:

at least one actuator in operable communication with a pair of rear wheels;
and

a controller operably interconnected with said actuator; a

means for receiving a plurality of signals indicative of a rear steering angle
of said rear wheels;

means for checking at least one of said plurality of signals to determine if
it falls outside a valid range and is invalid;

means for correlating at least a first signal of said plurality of signals with
at least a second signal of said plurality of signals to determine if either said first signal or
said second signal is invalid; and

means for signaling a rejection of if any of said plurality of signals are
found to be invalid.

Claim 18. (Currently amended) A controller for a rear-wheel steering system, the
controller comprising:

means for receiving a plurality of signals indicative of a rear steering
angle;

means for checking at least one of said plurality of signals to determine if
it falls outside a valid range and is invalid;

means for correlating at least a first signal of said plurality of signals with
at least a second signal of said plurality of signals to determine if either said first signal or
said second signal is invalid; and

means for signaling a rejection of any of if said plurality of signals are
found to be invalid.

Claim 19. (Currently amended) A controller for a rear-wheel steering system, the controller comprising:

at least one input terminal for receiving a plurality of signals indicative of a rear steering angle;

at least one comparator for checking at least one of said plurality of signals to determine if it falls outside a valid range and is invalid;

at least one correlation function for correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid; and

at least one output terminal for signaling a rejection of if any of said plurality of signals are found to be invalid.

Claim 20. (Previously presented) A method for determining a steering angle comprising:

receiving a plurality of signals indicative of said steering angle;

checking at least one of said plurality of signals to determine if it falls within a valid range;

correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine that neither said first signal nor said second signal is invalid;

determining a first value of said steering angle in accordance with said first signal; and

determining a second value of said steering angle in accordance with said first value of said steering angle and said second signal in order to obtain a more accurate measurement.

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